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Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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AUG 22 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

ListABCDE

In the Matter of)	OFFICE OF THE SECRETARY	15210N
Advanced Television Systems and Their Impact Upon the Existing Television)	MM Docket No. 87-268	
Broadcast Service	Ś		

SUPPLEMENT TO PETITION FOR RECONSIDERATION

Red River Broadcast Corp., by its attorneys, hereby supplements its

June 13, 1997, Petition for Reconsideration of the <u>Sixth Report and Order</u> in this proceeding. Red River objected to the <u>Sixth Report and Order's</u> allotment of DTV channels to three of its television broadcast stations, and sought modifications to those allotments. Red River's Petition was <u>unopposed</u>.

In a subsequent <u>Order</u>, the Commission invited "parties requesting reconsideration of individual allotments included in the DTV Table of Allotments to submit supplemental information relating to their petitions." This supplement is filed pursuant to that <u>Order</u>.

Red River operates Station KBRR(TV), Thief River Falls, Minnesota, and KJRR(TV), Jamestown, North Dakota, and holds a construction permit for a new station, KDLV(TV), Sioux Falls, South Dakota. The Sixth Report and Order assigned to these stations high UHF band DTV channels or channels that would be of Copies fee d

¹Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Order, released July 2, 1997, DA 97-1377.

face potential interference from land mobile operations. The Order failed to provide its methodology or its rationale for allotting these DTV channels. Red River's Petition showed that these allotments were unjustified because they impose significant costs on Red River and create potential interference problems, all of which could be avoided by allotting other DTV channels to the stations. Red River has, pursuant to the Commission's subsequent Order, completed engineering studies which are attached. Those studies identify substitute DTV allotments for all three stations which fully comply with the Commission's DTV rules, and eliminate the problems that the original DTV allotments created.

Station KBRR(TV). The DTV Table of Allotments allots to KBRR a much higher channel which would force it to move from NTSC channel 10 to DTV channel 57. Red River's Petition showed that this would impose significantly higher costs on Red River, that this burden was unfair because no other station in Minnesota was assigned a channel higher than channel 50, and that this disparate burden cannot be explained by any information provided by the Sixth Report and Order, and is thus arbitrary and improper. Moreover, KBRR, unlike any station in Minnesota, was given a DTV allotment outside the "core" spectrum, meaning that it must eventually relinquish its DTV channel. This places KBRR at a unique, unjustified and hence unlawful disadvantage, because no other station serving the state will be required to return its DTV channel.

Red River has now identified an alternative allotment, DTV channel 32, which fully resolves these problems. The attached Engineering Statement for

KBRR demonstrates that the allotment of DTV channel 32 fully would comply with the Commission's DTV and other rules, and with OST Bulletin No. 69.

Red River thus requests that the Table of Allotments be modified to replace the allotment of DTV channel 57 for KBRR with DTV channel 32.

Station KJRR(TV). This station operates on NTSC channel 7, but has been allotted DTV channel 14. Red River's Petition noted that the allotment of DTV channel 14 may create interference problems with adjacent land mobile operations on adjacent spectrum. The record in this proceeding has identified the difficulties posed by adjacent DTV / land mobile operations. This problem can be fully resolved by allotting DTV channel 30 to KJRR. The attached Engineering Statement for KJRR demonstrates that the allotment of DTV channel 30 fully complies with the Commission's DTV spacing and other rules, and with OST Bulletin No. 69. Red River thus requests that the Table of Allotments be modified to assign DTV channel 30 instead of channel 14 for KBRR.

Station KDLV(TV). The Sixth Report and Order allots channel 47 to KDLV, even though its authorized NTSC channel is 46. This allotment conflicts with evidence in the record of this proceeding that demonstrates potential interference from adjacent NTSC/DTV operations in the UHF band. Given the relatively few broadcast stations in the geographic area of Sioux Falls, South Dakota, there is no need for the assignment of adjacent channels in that market. Red River has conducted a study to identify alternative DTV allotments, which shows that the DTV/NTSC adjacent channel problem can be fully resolved by allotting DTV

channel 42 to KDLV. The attached Engineering Statement for KDLV shows

that the allotment of DTV channel 42 fully complies with the Commission's DTV

spacing and other rules, and with OST Bulletin No. 69. Red River thus requests

that the Table of Allotments be modified to assign DTV channel 42 instead of

channel 47 for KDLV.

The changes requested for these three station allotments are particularly

justified given that no party opposed Red River's petition for reconsideration.

For the above reasons, the Commission's Sixth Report and Order should

be modified to specify DTV allotments of channel 32 for KBRR, Thief River Falls,

Minnesota; channel 30 for KJRR, Jamestown, North Dakota, and channel 42 for

KDLV, Sioux Falls, South Dakota.

Respectfully submitted.

RED RIVER BROADCAST CORP.

By:

John T. Scott, III

Crowell & Moring LLP

1001 Pennsylvania Avenue, N.W.

Washington, D.C. 20004

(202) 624-2500

Its Attorneys

Dated: August 22, 1997

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ENGINEERING STATEMENT
ON BEHALF OF
KBRR(TV), CHANNEL 10, THIEF RIVER FALLS, MINNESOTA
RE PROPOSED CHANGE OF DTV ALLOTMENT
IN MM DOCKET NO. 87-268

AUGUST 1997

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

) ss
District of Columbia)
Donald G. Everist, being duly sworn upon his oath, deposes and states that:
He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;
That his qualifications are a matter of record in the Federal Communications Commission;
That the attached engineering report was prepared by him or under his supervision and direction and
That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true. Donald G. Everist District of Columbia Professional Engineer Registration No. 5714 Subscribed and sworn to before me this
Motary Public
My Commission Expires:

This engineering statement has been prepared on behalf of Red River Broadcast Corp., licensee of television broadcast station KBRR(TV), Channel 10, Thief River Falls, Minnesota, in support of its request to change the digital television (DTV) allotment assigned to KBRR(TV) in the Sixth Report & Order in MM Docket No. 87-268, "In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service". Red River Broadcasting Corp. filed a petition for reconsideration entitled, "Engineering Statement in Support of Petition for Reconsideration, MM Docket 87-268 on Behalf of Red River Broadcasting Corp., June 1997". In the petition for reconsideration, Red River Broadcasting Corp. voiced concern that it could not review the proposed DTV assignment until such time OET Bulletin 69 was made available. This filing is in response to that request. Specifically, KBRR(TV) requests a change in its DTV allotment from Channel 57 to Channel 32.

Proposed Change in DTV Allotment

KBRR(TV) is concerned that its FCC assigned DTV channel will fall outside the future core spectrum. KBRR(TV) has identified an alternate core channel suitable for its DTV use.

The attached Table I is an allocation study depicting the distances from the proposed Channel 32 DTV operation of KBRR(TV) to other NTSC stations. Table II is an allocation study depicting distances from the FCC allotted Channel 57 DTV operation of KBRR(TV) to other NTSC stations. Table III lists the pertinent co-channel

and first-adjacent channel DTV allotments surrounding KBRR(TV) DTV options (Channels 32 and 57).

KBRR(TV) believes that Channel 32 will provide it with similar replication as the assigned Channel 57 of its current Channel 10 service area. In addition, the use of a core spectrum channel is preferred.

TABLE I PROPOSED CHANNEL 32 DTV TO NTSC ALLOCATION STUDY AUGUST 1997

			Dista	tance	
Chan	<u>nei</u>	Call	City/State	<u>Actual</u> km	Required km
N	32	KBRR-DTV	Thief River Falls, MN		
N-15	17	None wit	thin 150 km		96.6
N-14	18	None wit	thin 150 km		96.6
N-8	24	None wi	thin 150 km		96.6
N-7	25	None wi	thin 150 km		96.6
N-4	28	None wi	thin 150 km		96.6
N-3	29	CBWT3	Piney, MB	124.6	96.6
N-2	30	None wi	thin 150 km		96.6
N-1	31	None wi	thin 150 km		88.5
N	32	None wi	thin 350 km		244.6
N + 1	33	None wi	thin 150 km		88.5
N+2	34	None wi	thin 150 km		96.6
N+3	35	None wi	thin 150 km		96.6
N+4	36	None wi	ithin 150 km		96.6
N+7	39	None wi	ithin 150 km		96.6
N+8	40	None wi	ithin 150 km		96.6

TABLE II DTV TO NTSC FCC CHANNEL 57 ALLOCATION STUDY AUGUST 1997

				Dista	ance
Chan	<u>nel</u>	Call	<u>City/State</u>	<u>Actual</u> km	<u>Required</u> km
N	57	KBRR	Thief River Falls, MN		
N-15	42	None wit	thin 150 km		96.6
N-14	43	None wit	thin 150 km		96.6
N-8	49	None wit	thin 150 km		96.6
N-7	50	None wi	thin 150 km		96.6
N-4	53	None wi	thin 150 km		96.6
N-3	54	None wi	thin 150 km		96.6
N-2	55	None wi	thin 150 km		96.6
N-1	56	None wi	thin 150 km		88.5
N	57	None wi	thin 350 km		244.6
N+1	58	None wi	thin 150 km		88.5
N+2	59	None wi	thin 150 km		96.6
N+3	60	None wi	thin 150 km		96.6
N+4	61	None wi	ithin 150 km		96.6
N + 7	64	None wi	ithin 150 km		96.6
N+8	65	None wi	ithin 150 km		96.6

TABLE III DTV TO DTV ALLOCATION STUDIES AUGUST 1997

				Dist	tance
Chan	nel	Call	City/State	<u>Actual</u> km	<u>Required</u> km
N	32	KBRR-DTV	Thief River Falls, MN		
N-1	31	None wi	thin 150 km		88.5
N	32	None wi	thin 280 km		223.7
N+1	33	None wi	thin 150 km		88.5

				Dist	ance
Chan	<u>inel</u>	Call	City/State	Actual km	Required km
N	57	KBRR-DTV	Thief River Falls, MN		
N-1	56	KGFE-DTV	Grand Forks, ND	122	88.5
N	57	None wi	thin 280 km		223.7
N + 1	58	KVLY-DTV	Fargo, ND	102	88.5

ENGINEERING STATEMENT
ON BEHALF OF
KJRR(TV), CHANNEL 7, JAMESTOWN, NORTH DAKOTA
RE PROPOSED CHANGE OF DTV ALLOTMENT
IN MM DOCKET NO. 87-268

AUGUST 1997

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

City of Washington)
) ss
District of Columbia) .

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission:

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this ______

Kotary Public

My Commission Expires: 2

This engineering statement has been prepared on behalf of Red River Broadcast Corp., licensee of television broadcast station KJRR(TV), Channel 7, Jamestown, North Dakota, in support of its request to change the digital television (DTV) allotment assigned to KJRR(TV) in the Sixth Report & Order in MM Docket No. 87-268, "In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service". Red River Broadcasting Corp. filed a petition for reconsideration entitled, "Engineering Statement in Support of Petition for Reconsideration, MM Docket 87-268 on Behalf of Red River Broadcasting Corp., June 1997". In the petition for reconsideration, Red River Broadcasting Corp. voiced concern that it could not review the proposed DTV assignment until such time OET Bulletin 69 was made available. The filing is in response to that request. Specifically, KJRR(TV) requests a change in its DTV allotment from Channel 14 to Channel 30.

Proposed Change in DTV Allotment

The requested change in DTV allotment for KJRR(TV) from Channel 14 to Channel 30 will resolve any potential first-adjacent channel incompatibility problems anticipated between KJRR(TV)'s DTV Channel 14 and land-mobile operations operating below 470 MHz.

KJRR(TV) is aware of tests conducted on a DTV transmitter in 1996¹ which indicated an approximate 25 dB increase in first-adjacent channel interference from out-of-band DTV signals into NTSC signals. Therefore, KJRR(TV) believes that it is

¹"Transmitter Considerations for ATV", Harris Corp, Broadcast Division, Robert J. Plonka, November 22, 1996.

not unreasonable to assume a 25 dB worsening in the first-adjacent channel interference to land-mobile stations compounding the incompatibility problems.

The attached Table I is an allocation study depicting the distances from the proposed Channel 30 DTV operation of KJRR(TV) to other NTSC stations. Table II is an allocation study depicting distances from the FCC allotted Channel 14 DTV operation of KJRR(TV) to other NTSC stations. Table III lists the pertinent co-channel and first-adjacent channel DTV allotments surrounding KJRR(TV) DTV options (Channels 30 and 14).

KJRR(TV) believes that Channel 30 will provide it with similar replication of its current Channel 7 service area as the assigned DTV Channel 14. In addition, the proposed Channel 30 DTV operation will remove the land-mobile incompatibility problem expected with the Channel 14 DTV allotment contained in the Sixth Report and Order in MM Docket 87-268.

TABLE I PROPOSED CHANNEL 30 DTV TO NTSC ALLOCATION STUDY AUGUST 1997

				Distance		
<u>Chan</u>	<u>nel</u>	Call	<u>City/State</u>	<u>Actual</u> km	Required km	
N	30	KJRR-DTV	Jamestown, ND			
N-15	15	None wit	hin 150 km		96.6	
N-14	16	None wit	thin 150 km		96.6	
N-8	22	None wit	thin 150 km	*	96.6	
N-7	23	None wit	thin 150 km		96.6	
N-4	26	None wit	thin 150 km		96.6	
N-3	27	APP	Grand Forks, ND	120.2	96.6	
N-2	28	None wit	thin 150 km		96.6	
N-1	29	None wit	thin 150 km		88.5	
N	30	None wit	thin 350 km		244.6	
N + 1	31	None wi	thin 150 km		88.5	
N+2	32	None wi	thin 150 km		96.6	
N+3	33	None wi	thin 150 km		96.6	
N+4	34	None wi	thin 150 km		96.6	
N+7	37	None wi	thin 150 km		96.6	
N+8	38	None wi	thin 150 km		96.6	

TABLE II DTV TO NTSC FCC CHANNEL 14 ALLOCATION STUDY AUGUST 1997

			Dist	ance
Chan	<u>nel</u>	Call City/State	<u>Actual</u> km	<u>Required</u> km
N	14	KJRR-DTV Jamestown, ND		
N-1		Land-Mobile Below 470 MHz		
N	14	KMCY Minot, ND	233.5*	244.6
N + 1	15	None within 150 km		88.5
N+2	16	None within 150 km		96.6
N+3	17	None within 150 km		96.6
N+4	18	None within 150 km		96.6
N + 7	21	None within 150 km		96.6
N+8	22	None within 150 km		96.6

^{*}Reduced spacing. KMCY (CP), File No. BPCT-830620KL with an ERP of 513 kW and HAAT of 829 meters which is less than full facilities.

TABLE III DTV TO DTV ALLOCATION STUDIES AUGUST 1997

				Dist	ance
Chan	<u>nel</u>	Call	City/State	<u>Actual</u> km	<u>Required</u> km
N	30	KJRR-DTV	Jamestown, ND		
N-1	29	None wit	hin 150 km		88.5
N	30	None within 280 km			223.7
N + 1	31	None within 150 km			88.5
				Dist	ance
				Dist	ance
Chan	<u>nel</u>	Call	<u>City/State</u>	<u>Açtual</u> km	<u>Required</u> km
N	14	KJRR-DTV	Jamestown, ND		
N-1		Land-Mobile	Below 470 MHz		
N	14	None wi	thin 280 km		223.7
N + 1	15	None wi	thin 150 km		88.5

ENGINEERING STATEMENT
ON BEHALF OF
KDLV(TV), CHANNEL 46, SIOUX FALLS, SOUTH DAKOTA
RE PROPOSED CHANGE OF DTV ALLOTMENT
IN MM DOCKET NO. 87-268

AUGUST 1997

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

City of Washington)
) ss
District of Columbia)

Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

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That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this _

1 L. Th

PAGE 1

This engineering statement has been prepared on behalf of Red River Broadcast Corp., permittee of television broadcast station KDLV(TV), Channel 46, Sioux Falls, South Dakota, in support of its request to change the digital television (DTV) allotment assigned to KDLV(TV) in the Sixth Report & Order in MM Docket No. 87-268 entitled, "In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service". Specifically, KDLV(TV) requests a change in its DTV allotment from Channel 47 to Channel 42. This engineering statement supplements the petition for reconsideration entitled, "Engineering Statement in Support of Petition for Reconsideration, MM Docket 87-268 on Behalf of Red River Broadcasting Corp., June 1997".

Proposed Change in DTV Allotment

The requested change in DTV allotment for KDLV(TV) from Channel 47 to Channel 42 will resolve any potential first-adjacent channel incompatibility problems anticipated between KDLV's DTV Channel 47 and KDLV's NTSC Channel 46. In addition, the Commission allotted DTV Channel 48 to KAUN, Sioux Falls, South Dakota, located 40.5 km from KDLV(TV).

KDLV(TV) is aware of recent transmitter tests conducted of DTV signal behavior in circuits typically found in broadcast final amplifiers which indicated up to an approximate 25 dB increase in first-adjacent channel interference from out-of-band DTV signals. Therefore, KDLV(TV) believes that it is not unreasonable to assume up

to a 25 dB worsening in the first-adjacent channel DTV to DTV ratios in the real-world situation, and thereby, directly impact KDLV(TV)'s Channel 46 NTSC operation.

The attached Table I is an allocation study depicting the distances from the proposed Channel 42 DTV operation of KDLV(TV) to other NTSC stations. Table II is an allocation study depicting distances from the FCC allotted Channel 47 DTV operation of KDLV(TV) to other NTSC stations. Table III lists the pertinent co-channel and first-adjacent channel DTV allotments surrounding KDLV(TV) DTV options (Channels 42 and 47).

KDLV(TV) believes that Channel 42 will provide it with similar replication of its authorized Channel 46 service area as that envisioned by the assigned DTV Channel 46. In addition, the undesired first-adjacent DTV Channel 47/NTSC Channel 46 and the first-adjacent DTV Channel 47/DTV Channel 48 situation at KDLV(TV) will be resolved.

TABLE I PROPOSED CHANNEL 42 DTV TO NTSC ALLOCATION STUDY AUGUST 1997

			_	Distance		
Channel		Call	City/State	<u>Actual</u> km	<u>Required</u> km	
N	42	KDLV-DTV	Sioux Falls, SD			
N-15	27	KSIN	Sioux Falls, SD	111.9	96.6	
N-14	28	None wi	thin 150 km		96.6	
N-8	34	None within 150 km			96.6	
N-7	35	None within 150 km			96.6	
N-4	38	None within 150 km			96.6	
N-3	39	None wi	thin 150 km		96.6	
N-2	40	None wi	thin 150 km	+-	96.6	
N-1	41	None wi	ithin 150 km		88.5	
N	42	KSAX	Alexandria, MN	267.4	244.6	
N + 1	43	None w	ithin 150 km		88.5	
N+2	44	KPTH	Sioux Falls, IA	105.4	96.6	
N+3	45	None w	ithin 150 km		96.6	
N+4	46	KDLV	Sioux Falls, SD	0	<24.1,>96.6	
N+7	49	None w	ithin 150 km		96.6	
N+8	50	None w	ithin 150 km		96.6	

TABLE II DTV TO NTSC FCC CHANNEL 47 ALLOCATION STUDY AUGUST 1997

<u>Channel</u>			<u>City/State</u>	Distance	
		<u>Call</u>		<u>Actual</u> km	<u>Required</u> km
N	47	KDLV-DTV	Sioux Falls, SD		
N-15	32	None wit	thin 150 km		96.6
N-14	33	None within 150 km		40.40	96.6
N-8	39	None wi	thin 150 km		96.6
N-7	40	None wi	thin 150 km		96.6
N-4	43	None wi	thin 150 km		96.6
N-3	44	None wi	thin 150 km		96.6
N-2	45	None within 150 km			96.6
N-1	46	KDLV	Sioux Falls, SD	0	<9.7,>88.5
N	47	KXLT	Rochester, MN	340.0	244.6
N+1	48	None wi	thin 150 km		88.5
N+2	49	None within 150 km			96.6
N+3	50	None wi	ithin 150 km		96.6
N+4	51	None within 150 km			96.6
N+7	54	None wi	ithin 150 km		96.6
N+8	55	None w	ithin 150 km		96.6

TABLE III DTV TO DTV ALLOCATION STUDIES AUGUST 1997

				Distance	
Channel		Call	City/State	Actual km	<u>Required</u> km
N	42	KDLV-DTV	Sioux Falls, SD		**
N-1	41	KTIV-DTV	Sioux Falls, SD	105.3	88.5
N	42	None within 280 km			223.7
N+1	43	None within 150 km			88.5

			•	Distance	
<u>Channel</u>		<u>Call</u>	<u>City/State</u>	<u>Actual</u> km	<u>Required</u> km
N	47	KDLV-DTV	Sioux Falls, SD	-	
N-1	46	None within 150 km			
N	47	None within 280 km			
N + 1	48	KAUN-DTV	Sioux Falls, SD	40.5	<32.2,>88.5